

follows: Acetone, 2 parts; ether, 1 part; water, 1 part. Keep in this at least one hour for each millimeter of thickness of the tissue. Transfer to a mixture of equal parts of acetone and ether saturated with paraffin. Transfer to paraffin.

3. *Simultaneous Polychrome Stain*—Saturated watery toluidin-blue with 3 per cent formol, 12 parts; alcohol, 90 per cent, 8 parts; acetone, 4 parts; saturated naphthol-yellow in 90 per cent alcohol, 2 parts; saturated erythrosin pur., in 90 per cent alcohol, 3 parts. Mix in above order. Add 5 to 10 parts of distilled water. Let stand. No precipitate should appear. The fluid should be a dark blue, with a violet shade in a few minutes.

4. *Adhesions of Sections to Slide*—When the paraffin sections are floating in warm water, add one drop of cedarwood oil. This spreads as a thin film over the surface of the water. Sections mounted direct from this fluid will adhere firmly.

#### REDUCING STOCK SOLUTIONS

Löwe (Zeits. wiss. Mikr., XXIX, p. 545) suggests a simple method for reducing concentrated stock solutions of reagents to the dilute form in which they are to be used. Pour into the graduate a quantity of the stock solution, whose cubic centimeters equal in number the *percentage strength* desired in the dilute solution. Add to this enough of the diluting fluid to make a total number of cubic centimeters equal to the percentage strength of the original stock solution. If, for example, one wishes to make a 2 per cent solution from a 15 per cent stock solution, put 2 c.c. of the stock solution into the graduate and then fill until it totals 15 c.c.

#### PARASITOLOGY; LABORATORY GUIDE

This laboratory manual for the study of parasites will be of great value to zoology teachers who are not themselves experts in parasitology. The exercises included in the book are based on courses in the University of California on Human Parasitology and Veterinary Parasitology, each of one half year.

The introduction deals briefly with the biology of parasitism. The body of the book is divided into three parts, as follows: I., Medical Etymology; II., Helminthology; and III., Life History Studies on Living Parasites.

Part I. opens with a brief discussion of insects and diseases. Exercises follow, among others, on the mouth parts of insects; the internal structure of insects; biting lice; sucking lice; bed bugs; mosquitos; buffalo gnats; horse flies; house flies; fleas; ticks; mites; venomous spiders; ameba; trypanosomes; malarial parasites.

Part II. includes exercises on the round worms, hookworms, lungworms, trichina, filariae; leeches; liver fluke and other trematodes, cestodes.

Part III. provides for the study of the life history of the common house fly, the mosquito, and the flea, and gives suggestions of general procedure in the investigation.

There are useful exercises on parasiticides and anthelmintics, and their value.

In most groups both morphological and systematic studies are outlined.

The book could have been made more valuable for the general zoologist without a great increase in its size, by the addition of a few devices for identification at least of some of the less commonly known parasites, with suggestions for finding, preparing, and displaying them. The exercises pre-suppose ready-made preparations, except in the three life-histories in Part III. The exercises do not make as much use of the suggestive question and the research spirit on the part of the student as the reviewer feels is wise; but rather follows the method of indicating what is to be found and expecting the student to verify and identify the findings.

A Laboratory Guide to the Study of Parasitology, by W. B. Herms, The Macmillan Company, New York. 72 pages. Price 80 cents net.

#### PREVENTION AND CONTROL OF DISEASE

This book is designed to bring the remarkable work of research students of recent years, in respect to the prevention and control of diseases, within reach of the general public. It is felt that such an increased audience which understands something of the steps necessary to control disease will advance the work in two ways. It will make the general public more sympathetic with the investigations that are necessary to get the facts, and more willing to support the legislators and the health officials who must apply them.